

1. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising the steps of:
  - identifying a parameter associated with a data packet transported across the network;
  - measuring the parameter; and
  - enabling optimization of the network bandwidth when said measured parameter differs from a predetermined value.
2. Apparatus for dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising:
  - first and second PBX cabinets interconnected in a local area network configuration for sending and receiving data packets;
  - a register in connection with at least one of said cabinets for storing a value associated with a given packet;
  - a comparator for comparing said value with a predetermined value; and
  - an optimization mechanism for adjusting the bandwidth of the network when said measured value differs from a predetermined value.
3. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising as set forth in claim 1, wherein:
  - said parameter comprises a sequence number associated with the payload portion of said data packet.
4. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising as set forth in claim 1, wherein:
  - said parameter comprises measurement of the difference in arrival times of packets sent across the network and back between a first packet and a second packet.

- said parameter comprises measurement of the difference in arrival times of packets sent across the network and back between the average value of arrival times of a group of packets and a second packet.

- storing the sequence numbers of data packets in a register.

- storing sequence numbers associated with successive data packets in the register.

- monitoring the sequence of sequence numbers associated with successive data packets stored.

- incrementing a counter in the register by a count of one when the sequence numbers of successive data packets stored are in sequential order; and

10. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising as set forth in claim 9, further comprising the substep of:

11. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising as set forth in claim 10, wherein:

12. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising as set forth in claim 11, wherein:

13. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising as set forth in claim 10, wherein:

14. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising as set forth in claim 13, wherein:

15. A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising as set forth in claim 13, wherein:

16/ A method of dynamically adapting a PBX network to maintain a Quality of Service level in the network comprising the steps of:

determining which cards are not present; and

associating channels of a packet with only the cards which are physically present.

